[CLAIMS]

1. A method for requesting channel quality information (CQI) in a wireless portable Internet system, comprising:

a) a base station determining timing of a channel quality information request;

b) requesting an automatic repeat request acknowledgement (ARQ-ACK) message of downlink data upon requesting the CQI from a subscriber station;

c) allocating a radio resource for the ARQ-ACK message and the channel quality report to the subscriber station;

d) receiving information on the ARQ-ACK message and the channel quality report; and

e) determining a modulation and coding level of downlink data by extracting the channel quality report information from the ARQ-ACK .

2. The method for reporting the channel quality information of claim 1, further comprising:

a-1) determining whether uplink data to be received by the base station exists, after a);

b-1) transmitting a piggyback identifier of uplink data to be used to request the CQI to the subscriber station when the uplink data exists;

c-1) allocating a radio resource for reporting the CQI to the subscriber station;

d-1) receiving the channel quality report information piggybacked on the uplink data; and

e-1) extracting the CQI from the uplink data, and determining a modulation and coding level of downlink data based on the reported CQI.

3. The method for reporting the channel quality information of claim 2, further comprising:

a-2) determining whether the ARQ-ACK message exists in a-1), when no uplink data to be received by the base station exists;

b-2) transmitting an REP_REQ medium access control (MAC) message to the subscriber station when no ARQ-ACK message exists;

c-2) allocating the radio resource for reporting the CQI to a dedicated channel;

d-2) receiving the REP_REQ MAC message through the dedicated channel; and

e-2) determining a modulation and coding level of downlink data based on the reported CQI.

4. The method for reporting the channel quality information of one of claims 1 to 3, wherein the CQI is a mean value or standard deviation of a carrier to interference noise ratio (CINR) of the downlink.

5. The method for reporting the channel quality information of one of claims 1 to 3, wherein information on the radio resource allocated for reporting the CQI is transmitted while being included in the UL-MAP of a downlink frame.

6. The method for reporting the channel quality information of one of claims 1 to 3, further comprising:

controlling the period and frequency of the CQI based on the received CQI.

7. The method for reporting the channel quality information of claim 4, further comprising:

allocating a radio resource for reporting the CQI at the front time slot of the uplink resource for the subscriber station having the larger standard deviation of the CINR.

8. A method for reporting channel quality information in a wireless portable Internet system, comprising:

a) determining whether transmission of an ARQ-ACK message and a REP-REQ is provided from a base station;

b) updating the two values into latest values by measuring the CQI when the transmission is provided;

c) acknowledging a radio resource allocated for the ARQ-ACK message and the CQI; and

d) transmitting the CQI to a base station while being included in the ARQ-ACK message.

9. The method for reporting the channel quality information of claim 8, further comprising:

a-1) determining whether a piggyback identifier for transmitting the CQI

is transmitted from the base station;

b-1) measuring the CQI and updating the same into the latest values when the piggyback identifier is transmitted;

c-1) acknowledging a radio resource allocated for the CQI among the radio resources piggybacked on the uplink data; and

d-1) transmitting the CQI piggybacked on the uplink data to the base station.

10. The method for reporting the channel quality information of claim 8, further comprising:

a-2) determining whether the REP_REQ MAC message is transmitted from the base station;

b-2) measuring the CQI and updating the same into the latest value when the REP_REQ MAC message is transmitted;

c-2) acknowledging a radio resource of a dedicated channel allocated for the CQI report; and

d-2) transmitting the CQI through the dedicated channel to the base station.

11. The method for reporting the channel quality information of one of claims 8 to 10, wherein the CQI is a mean value or standard deviation of a carrier to interference noise ratio (CINR) of the downlink.

12. The method for reporting the channel quality information of one of claims 8 to 10, wherein the radio resource allocation information for reporting the

CQI transmitted to the base station is included in the UP-MAP of an uplink frame.

13. A method for requesting and reporting channel quality information in a wireless portable Internet system, comprising:

a) a base station determining whether uplink data to be received exists within a predetermined period, and whether an ARQ-ACK message for a transmitted downlink exists;

b) requesting to piggyback the CQI on the uplink data and to transmit the CQI therewith when the uplink data exists;

c) requesting to include the CQI in the ARQ-ACK message and to transmit the CQI therewith when the ARQ_ACK message exists;

d) transmitting the REP-REQ through a channel allocated for CQI when neither the uplink data nor the ARQ-ACK message exists; and

e) reporting the CQI to the base station according to the request of b) to d).